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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,995	01/11/2005	Graham John McLeish		5217

7590 12/16/2005

Graham McLeish
Woolmill Croft Ardlethen
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UNITED KINGDOM

EXAMINER

HARVEY, JAMES R

ART UNIT	PAPER NUMBER
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2833

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/520,995	Applicant(s) MCLEISH, GRAHAM JOHN	
	Examiner James R. Harvey	Art Unit 2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-10,12-17,21,24,25,27-34 and 41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-10,12-17,21,24,25,27-34 and 41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. <u>20051208</u> . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4-14-05</u> . | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Prosecution by Inventor

- An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

A listing of registered patent attorneys and agents is available on the USPTO Internet web site <http://www.uspto.gov> in the Site Index under "Attorney and Agent Roster." Applicants may also obtain a list of registered patent attorneys and agents located in their area by writing to the Mail Stop OED, Director of the U. S. Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450

Claim Cancellations

- The cancellations of claims 7,11,18-20,22,23,26-28 and 35-40 has been made of record.

Election/Restrictions

- Applicant's election with traverse of species election requirement dated 11-21-05 is acknowledged. The traversal is on the ground(s) that all the different species produce in the same way the benefits achieved of using annular shaped magnets with open magnetic fields at the bottom of and inside a wall (i.e. automatic seeking, location and connection) with no possibility of a misconnection in an offset position. Different styles or shapes of a

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connection for lighting or power requirements do not change the single general inventive concept of my electrical connector.

- This argument is found convincing and the restriction requirement is withdrawn.

Specification

- The disclosure is objected to because of the following informalities: The different applicable paragraphs below require headings.

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) NOT Required for this application. ~~Cross References to Related Applications~~: See 37 CFR 1.78 and MPEP § 201.11.
- (c) NOT Required for this application. ~~Statement Regarding Federally Sponsored Research and Development~~: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) NOT Required for this application. ~~Incorporation By Reference Of Material Submitted On a Compact Disc~~: The specification is required to include an incorporation by reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(e)), "Sequence Listings" (37 CFR 1.821(e)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, Reference to a "Microfiche Appendix": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.

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- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
- (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations

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to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).

- (k) NOT Required for this application. Abstract of the Disclosure: See MPEP § 608.01(f). ~~A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims.~~ In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

Claim Rejections - 35 USC § 102

- The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject

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matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim Examination

** Claim(s) 1,2-6 and 8 is/are rejected under 35 U.S.C. 102(b) as being anticipated by Mathauser (US 3810258).

-- In reference to Claim(s) 1, Mathauser shows (cover sheet)

a male part 11 and a female part 12 for engagement therewith; the male part comprising a first terminal 15 having a circular cross section and a second terminal 13; the female part comprising engaging means (magnets) to engage the terminals;

wherein the male and female parts each comprise a magnetic portion adapted to attract the parts together to form an electrical connection.

-- In reference to Claim(s) 2 and 8, Mathauser (cover sheet)

magnetic misconnection means 16.

In particular reference to the recitation "to prevent the male and female part from connecting in a non-concentric position" is seen to be for the intended use of the claimed structure and is given little patentable weight, since it has been held a recitation with respect to the manner in which a claimed apparatus is intended be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

-- In reference to Claim(s) 3, Mathauser shows (cover sheet)

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at least some of a magnetic field emitted from at least one of the magnetic portions extends beyond the magnetic misconnection means 16 to attract the parts together to form an electrical connection.

-- In reference to Claim(s) 4, Mathauser shows (cover sheet)

the magnetic misconnection means comprises a wall (outer circumference) extending away from the magnetic portion of one of the male and female parts, the wall being adapted to prevent the male and female parts from connecting in a non-connecting position.

-- In reference to Claim(s) 5, Mathauser shows (cover sheet) a pendent means 24.

-- In reference to Claim(s) 6, Mathauser shows one of the connectors connected to the pendent means 24.

-- In reference to Claim(s) 7, it has been canceled

** Claim(s) 1,2, 8-10 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Brazier et al. (UK Patent Application 2360637).

-- In reference to Claim(s) 1, Brazier shows (cover sheet)

a male part B and a female part A for engagement therewith; the male part comprising a first terminal 15 having a circular cross section and a second terminal 14; the female part comprising engaging means (25,26) to engage the terminals;

wherein the male and female parts each comprise a magnetic portion (7,13) adapted to attract the parts together to form an electrical connection.

-- In reference to Claim(s) 2 and 8, Brazier shows the female part has a projecting portion (see examiner's figure) which is adapted to be received within the male part.

-- In reference to Claim(s) 9, Brazier shows the magnetic portion of the female part has a

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magnetic field which extends beyond the projecting portion to attract the parts together to form an electrical connection.

-- In reference to Claim(s) 41, Brazier shows (cover sheet) relative rotational orientation.

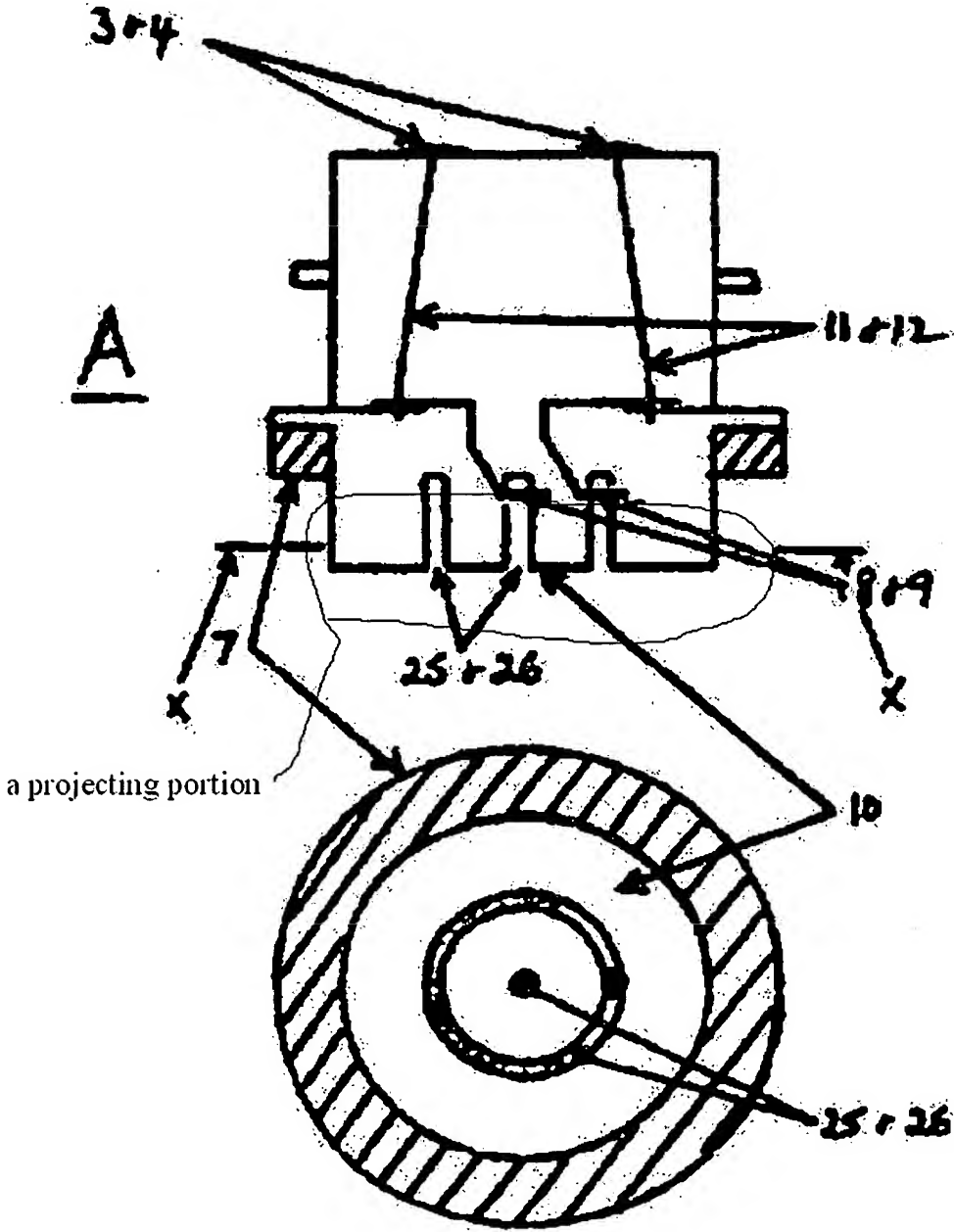
** The following claim(s) is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Brazier.

-- In reference to Claim(s) 10, Brazier does not explicitly show the projecting portion is adapted to have a degree of freedom to pivot within the male part.

Degrees of freedom, in there broadest sense, are dependent upon size.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to change the size of the male and female parts of Brazier in order to adapt them for a degree of freedom, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

One skilled in the art would have been motivated to change the size in order to allow for a possible difference in the coefficient of thermal expansion between the male and female parts.



DETAIL FROM X

-- In reference to Claim(s) 11, it has been canceled

-- In reference to Claim(s) 12, Brazier shows an aperture 25.

-- In reference to Claim(s) 13, Brazier shows the two terminals and each of the male and female parts. As to the intended use of the terminals being for neutral or live, they can be used for either neutral or live connections. In particular reference to the recitation "neutral or live" is seen to be for the intended use of the claimed structure and is given little patentable weight, since it has been held a recitation with respect to the manner in which a claimed apparatus is intended be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

-- In reference to Claim(s) 15, Brazier shows (figure 1) the terminals 8 and 9 are resilient.

**** The following claim(s) is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Brazier in view of Delmau Ferrerfabrega et al. (2002/0086559); herein referred to as Delmau.**

-- In reference to Claim(s) 16, Brazier shows substantially the invention as claimed. However, Brazier does not discuss the benefits of an earth terminal.

Delmau teaches that magnetic means can be used with three-prong connectors.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add an additional terminal, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8 .

One skilled in the art would have been motivated add an earth terminal in order to make the connector of Brazier marketable to organization that are required to meet the safety standards associated with a three prong connector.

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-- In reference to Claim(s) 17, Brazier shows the terminals are concentric.

-- In reference to Claim(s) 18-20, they have been canceled.

(19) **United States**

(12) **Patent Application Publication**

Dalmau Ferrerfabrega et al.

(10) Pub. No.: **US 2002/0086559 A1**

(43) Pub. Date: **Jul. 4, 2002**

(54) **SAFETY CONNECTOR FOR HOUSEHOLD
TABLE-TOP ELECTRICAL APPLIANCES**

Publication Classification

(75) Inventors: **Octavi Dalmau Ferrerfabrega,**
Barcelona (ES); Felix Pedrosa Garcia,
Barcelona (ES)

(51) Int. Cl.⁷ **H01R 11/30**

(52) U.S. Cl. **439/39**

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(57) **ABSTRACT**

A safety connector for a table-top household electrical appliance, formed by a socket member (3) mounted in the appliance and a plug member (2) complementary to the socket member (3), and having magnets that allow a plugged-in position to be maintained and separation of both parts under an abnormal strain exerted on the plug member. The socket member (3) comprises pins (14) and a grounding arrangement (20), with a magnet arrangement (15) and two active armatures (16) between them. The plug member (2) comprises two flexible electrical contacts (7), spatially mating with the pins (14). An iron plate member (11) as passive armature is located between the electrical contacts (7) and when making connection, it faces the active armatures (16) of the magnet (15) and makes contact with the ground (20).

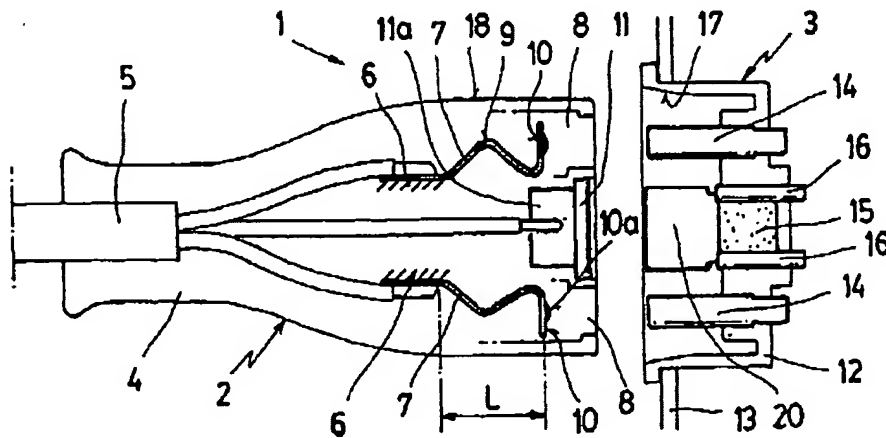
(73) Assignee: **FURAS, S.A.**

(21) Appl. No.: **10/032,466**

(22) Filed: **Jan. 2, 2002**

(30) **Foreign Application Priority Data**

Jan. 2, 2001 (ES) **200100001**



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**** The following claim(s) is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Brazier in view of Foreign Patent FR2808624 as listed on the application papers dated 1-11-05 from applicant's international application).**

-- In reference to Claim(s) 21, as discussed in the rejection of claim 16 (from which claim 21 depends, Brazier shows substantially the invention as claimed.

However, Brazier does not show the sequential connection of the terminals.

It is known to arrange terminals of connectors sequentially. French Foreign Patent FR2808624 shows (cover sheet) the terminals are arranged sequentially.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the terminals of Brazier in a sequential manner, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

One skilled in the art would have been motivated to use the sequential arrangement because it allows for less force to bring the terminals together individually than at the same time, thereby allowing a smaller magnet and less overall weight.

-- In reference to Claim(s) 22 and 23, they have been cancelled.

-- In reference to Claim(s) 24, Brazier shows circular cross sections.

-- In reference to Claim(s) 25, Brazier shows annular ring forms.

-- In reference to Claim(s) 26-28, they have been cancelled.

-- In reference to Claim(s) 29, Brazier shows a lamp or light bulb use.

**** The following claim(s) is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Brazier.**

-- In reference to Claim(s) 30-32, the distances apart is seen to be a function of the force generated by the magnet.

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It is known that different materials or sizes of magnets change the amount of force generated by the magnet.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to choose the material or size of the magnet, since a change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955) or since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416 (CCPA 1960).

One skilled in the art would have been motivated to choose the force of the magnet in order to make the arrangement of Brazier marketable to customer's desiring a particular length of travel.

**** Claim(s) 33 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Mathauser.**

-- In reference to Claim(s) 33, Mathauser shows (cover sheet) a tapered face.

-- In reference to Claim(s) 34, Mathauser shows the terminals are concentric.

-- In reference to Claim(s) 35-40, they are cancelled.

-- In reference to Claim(s) 41, it is addressed above with the 102 rejection of Brazier.

Conclusion

- The prior art listed on PTO form 892 that is made of record and not relied upon is considered pertinent to applicant's disclosure because it shows the state of the art with respect to applicant's claimed invention.

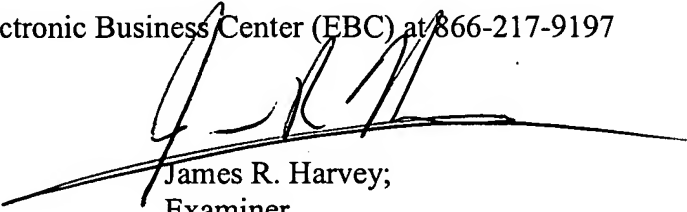
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- Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Harvey whose telephone number is 571-272-2007. The examiner can normally be reached from 8:00 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571-272-2800 extension 33.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2800.

- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



James R. Harvey;
Examiner
jrh
December 9, 2005